ABSTRACT

A fuel cell hybrid vehicle utilizing flooded aqueous battery or batteries operatively coupled to a fuel cell stack, an electric drive motor, and an integrated watering system, the integrated watering system comprising: a heat exchanger configured to extract water from exhaust air from the fuel cell stack; a reservoir, operatively connected to store the water; a sensor, operatively connected to generate a signal based on the flooded aqueous batteries' electrolyte level; a pump, operatively connected to the reservoir and the flooded aqueous batteries; and a system controller, operatively connected to receive and evaluate the signal from the sensor and actuate the pump to move water from the reservoir to the flooded aqueous batteries.